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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,774	10/15/2001	Hal Pringle	DKT 01096 (BWI-00073)	3759

7590 03/11/2003

Patent Docket Administrator  
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Troy, MI 48007-5060

EXAMINER

MCANULTY, TIMOTHY P

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/977,774

Applicant(s)

PRINGLE ET AL.

Examiner

Timothy P McAnulty

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 October 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 22 October 2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.
2. The drawings are objected to because the leader line for reference numeral should be corrected to indicate the intake opening in plate 19 and not the pumping chamber 17 as shown in figure 2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:
  - a. the reservoir as claimed in line 8 of claim 1, line 2 of claim 19, and line 6 of claim 22;
  - b. an intake and an exit port as claimed in line 7 of claim 1;
  - c. a valve manifold as claimed in line 1 of claim 6; and
  - d. the pump element being a piston, spur gear, vane, crescent centrifugal, turbine, or regenerative as claimed in line 2 of claim 10;

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a. The location and operation of the exit port of the pump chamber is not understood. Namely, the specification is silent regarding an exit port element: page 4, first paragraph of the specification discloses intake ports 20 and 22 for receiving fluid from the reservoir; and page 5, second paragraph of the specification discloses an opening 36 which allows lubrication and cooling of the motor with the fluid in the reservoir. There is no mention of the pumping chamber having an exit port through which the pump discharges fluid.

b. Claims 17 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The operation of the pump as it responds to demand requirements of the engine, transmission or transfer case is not understood.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1 is unclear if each of a transmission, transfer case or engine have a reservoir or if the pump is contained within a transmission, a transfer case, or an engine reservoir as claimed in lines 1-2 of claim 1.
- b. It is unclear if the limitation "a pump element" in line 6 of claim 1 is the same pump element as that which is recited in line 3 of claim 1 or a different element.
- c. The recitation of "said reservoir" in line 8 of claim 1 and line 2 of claim 19 lacks antecedent basis.
- d. Claim 3 is unclear as to which element the inlet or outlet porting is provided as claimed in lines 1-3 of claim 3.
- e. Claim 14 is unclear as to how the stator is positioned for keeping said armature off of said bearing as claimed in lines 1-2 of claim 14.
- f. Claim 15 is unclear regarding the limitation that the spaces in between the magnets "are full" as recited in lines 2-3 of claim 15.
- g. Claim 22 is unclear regarding what the submerged pump housing is submerged in.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1-22 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Zepp et al. in view of Ford, Jr. et al.

Zepp et al. discloses a pump assembly comprising a pump housing; a pump element; an electric motor; a pumping chamber; an intake port; an exit port; a wall separating said motor from said pump which includes an opening communicating said pumping chamber and said motor; and a port plate. However, Zepp et al. does not disclose at least one of said intake or exit port connected to porting in a surface of a component to which the pump assembly is attached. However, Ford, Jr. et al. teaches in figure 2, a pump assembly attached to an engine comprising a pump element located within a pump chamber wherein said engine has porting 34,36 located therein which connects to said pump via said pump chamber. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Zepp et al. in view of the teachings of Ford, Jr. et al. to attach the pump assembly directly to porting in a component to utilize existing fluid porting and thereby eliminating the need for additional external porting and thus simplify the pump assembly.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent documents are cited to further show the state of the art regarding pumps in general:

US Patent No. 6,488,486 B1 to Debleser

US Patent No. 5,605,448 to Martin, Sr.

US Patent No. 5,431,547 to Boyko

US Patent No. 5,090,876 to Hashizume et al.

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US Patent No. 4,421,453 to Hoff et al.

US Patent No. 5,007,806 to Bellis et al.

US Patent No. 4,978,282 to Fu et al.

US Patent No. 4,834,040 to Yoshida

US Patent No. 4,642,030 to Friebe et al.

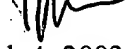
US Patent No. 2,634,686 to Schmitter

Japanese Patent Document JP5-214916

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P McNulty whose telephone number is 703.308.8684. The examiner can normally be reached on Monday-Friday (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on 703.308.3668. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7687 for regular communications and 703.305.7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.

tpm   
March 4, 2003

 3/6/03  
William C. Joyce  
Patent Examiner